DOH-Construction Review Services

The Square Knot

Volume 2, Issue 4
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A publication to join in a partnership, with our customers, for world class healthcare.

Washington State Department of Health
CONSTRUCTION REVIEW SERVICES

Inside this issue:

Questions?!?

Give us a call

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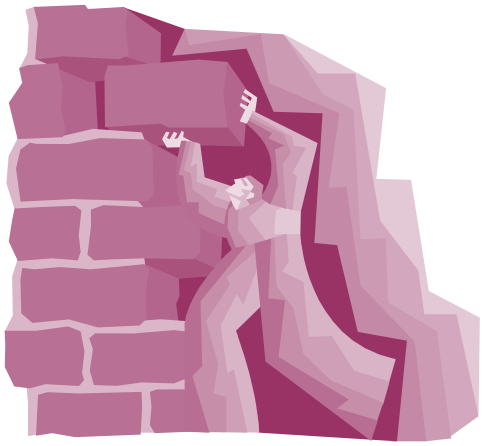
www.doh.wa.gov/crs

When will the International 'Family of Codes' REALLY take effect?

This question was posed at the summer quarterly business meeting of the Washington Association of Building Officials (WABO). On May 14, 2003, Governor Locke signed state house bill SHB 1734 amending the State Building Code Act allowing the State Building Code Council (SBCC) to adopt the 2003 editions of the International Code Council (ICC) building, mechanical, and fire codes as well as the International Association of Plumbing and Mechanical Officials (IAPMO) plumbing code as the state building code family. August 1, 2003, is the day the use of the ICC family of codes takes effect as the basic portion of the state building code.



Until the passage and signing of this bill, the Uniform Building Code 'family of codes' was the basic portion for the state building code. However, the SBCC had made many amendments to this Uniform Building Code, and these amendments will remain in effect until removed or altered by the SBCC. The SBCC is currently involved in the review of the state amendments to see if the ICC family of codes has addressed the issue or if all parts of these amendments need to be incorporated into the new State Building Code. This review of the current amendments with adoption of any changes will not take effect until July 1, 2004.

So, what is everyone to do during this eleven month transition period? At their summer quarterly business meeting the WABO members voted to recommend that each local jurisdiction accept either the 1997 Uniform Building Code with the current state amendments, or the 2003 International Building Code with the current state amendments adjusted as required for proper dovetailing of sections. The choice of which basic code to use, (UBC) or (ICC), would be up to the client. However, it would be an all or nothing choice, meaning the client cannot choose one section from the UBC and another from the ICC.

Construction Review Services (CRS) has decided to follow this model also for this transition period. Whichever basic code is allowed by the local building official for a project initially submitted for review after August 1, 2003, is the basic code that CRS will recognize during our review of the construction documents. We are doing this in an effort to minimize confusion on the parts of the client, the local building official, the design team, and ourselves.

-Richard Swanson

The Last Word: The 'Hidden' Victims of Alzheimer's Disease

Imagine living with a parent who goes to the grocery store, only to return hours later with no knowledge of where they have been or where they left the car. Or kissing your husband of 50 years and having him ask, "Who are you?"

For the 19 million Americans who care for persons with Alzheimer's disease (AD), these experiences are commonplace. Most of us appreciate how AD victimizes those it afflicts. What we may not realize, is that this tragic disease has more than one victim. There are other, "hidden" victims: the family, friends and caregivers of the person with Alzheimer's.

When families first receive a diagnosis of Alzheimer's disease, they vacillate between trying to get information and trying to find some other, less terrifying explanation for the symptoms they see. In the earliest stages of the disease, it is easy to dismiss the forgetfulness, confusion and subtle personality changes as depression or stress. Most of the time, the person with Alzheimer's seems fine. Many are still driving, working and living alone. One of my clients played golf and did volunteer work for two years after his diagnosis.

However, AD is progressive. As the disease destroys more brain cells, the initial symptoms worsen and new ones appear. The person with Alzheimer's has difficulty remembering who they are or what they did five minutes ago. They need direction to complete routine tasks like making coffee. They have trouble putting sentences together or understanding what is being communicated to them. Easily overwhelmed by a world that has become confusing and nonsensical to them, they react with extreme anger and distress over seemingly minor events.

This is the point when the hidden victims seek help. The terrible truth can no longer be denied: The person they love has Alzheimer's disease. Each and every day, AD will steal another piece of them, turning them into a stranger who, cruelly, still looks like the person they once loved. The worst part for the caregiver is the overwhelming feeling of helplessness. For no matter what they do, they can't stop AD from taking their loved one away. There is no treatment to restore lost capabilities and there is no cure.

Grief is an inevitable reaction. But this is a grief unlike any other. The person is still here. They look healthy. Sometimes, because of the fluctuating nature of the disease, they even seem like their old selves. Then they ask you, while they stand in their home of 35 years, where they are, and you know you have lost them. It is hard to grieve under these circumstances and hard to get other people to understand and acknowledge your loss. With a course that can last up to 20 years, families call it "the funeral that never ends."

AD also victimizes caregivers physically. As the person with Alzheimer's becomes increasingly incapacitated, they require constant supervision, 24 hours a day. Families must assume all of the responsibilities of a person who has Alzheimer's. Assistance is needed for all of their activities, such as bathing, grooming and toileting. Most of these efforts are met with anger and resistance, since the person with the disease often doesn't recognize their need for help. The demands are so great that many caregivers give up their jobs, their social lives and their recreational activities, at a time when they need them most. It takes a toll; 50 percent of caregivers become depressed and 80 percent report high stress and stress-related symptoms.

When caregivers try to seek help they discover another problem. Help is available but it is very expensive. In-home care costs up to $18 an hour. Residential care costs between $2,500 and $6,000 a month. Furthermore, there are virtually no insurance benefits for these services. Another problem is that we have no way of predicting, at the time of diagnosis, how long the person with Alzheimer's will live. In the face of a lengthy, chronic illness with limited resources for long-term care, caregivers often postpone seeking the help they need.

Until a cure is found, Alzheimer's disease will continue to take a toll on the emotional, physical and financial resources of the hidden victims. They deserve recognition and support. They need to know they are not alone.

For support groups and other information for the hidden victims of Alzheimer's disease, contact the Alzheimer's Association. You can find your local chapter by calling 1-800-272-3900 or checking www.alz.org/findchapter.asp.

-Terry Ullman, FDA Consumer Magazine, July-August 2003 Issue

Migrant Farm Worker Housing Construction

On February 17, 1999, the Washington State Department of Health, Migrant Farm Worker Housing Construction Standards went into effect giving the Department of Health (DOH) the authority to conduct plan reviews and issue building permits for buildings used for temporary workers located on a rural worksite, usually the grower's land.

The authority having jurisdiction (AHJ), the county or city where the building will be located, is responsible for issuing approvals for potable water, onsite sewage disposal system, land use requirements for the height of the building, property line set backs and road access.

Washington State law requires (1) adequate supply of drinking water be provided to each building site prior to issuance of the building permit, and (2) a functioning, approved onsite sewage system for treatment and disposal of human waste and wastewater. You may contact your local county health department for additional information and assistance on acquiring approvals for the above systems.

Plan Review Requirements

Please submit a completed checklist, along with a completed Construction Review Services (CRS) application, appropriate review fee, and all the required information needed to fully define the proposed project and showing how it conforms to the governing regulations. Below is a checklist to use as a guideline for making a submission.

- ❑ Submit a completed CRS application
- ❑ Appropriate review fee (WAC 246-359-990)
- ❑ Site Plan
- ❑ Site Approval Requirements for Plan Review, per WAC 246-359-150 for the following:
  - ❑ Approval for water from AHJ.
  - ❑ Approval for sewage disposal system from AHJ.
  - ❑ Approval for building height, property line setbacks, and road access from AHJ.

Two sets of building construction plans, including:

- Foundation Plan
- Floor Plan
- Cross-section View
- Elevations
- Mechanical Layout
- Electrical Layout
- Plumbing Layout
- Specifications
- Door Schedule
- Window Schedule
- Hardware Schedule
- Finish Schedule

Design-build documents must be included with the balance of the construction documents before any of the construction documents will be reviewed.

Reviews are given a 14-day target date. The goal of CRS is to receive, review, and approve your project for construction with the initial 14-day review period. This can be accomplished by your quick response to all questions and requests for additional information by CRS. If required, re-submittals must contain written responses to each CRS review comment, in addition to two (2) sets of revised drawings (if requested).

Building Plan Approval

You will be notified in writing with a "plan review approval letter." Once approved, you will have one (1) year from the approval date to complete construction and achieve final certificate of occupancy for the project.

Your project's status is available to you online at www.doh.wa.gov/crs throughout the review. If you have any questions, please contact CRS at (360) 236-2944.

Rabies: Dead Men Tell No Tails

Rabies is a severe viral disease that affects the central nervous system. It is almost always fatal. All warm-blooded mammals including humans are susceptible to rabies.

What mammals carry rabies? Bats are the only rabies reservoir in the Pacific Northwest. In Washington, rabies has not been found in raccoons, skunks, foxes or coyotes. These species may carry the virus in other regions of the United States. Worldwide in developing countries dogs are the principal rabies reservoir.

How common is human rabies and what is the source of the rabies virus? Human rabies is an extremely rare disease. Since 1990 the number of reported cases in the United States has ranged from 1 to 6 cases annually. Almost all human rabies cases acquired in the United States since 1980 have been due to bat rabies virus. When human rabies occurs due to exposure outside of the United States it is usually the result of the bite of a rabid dog. Cats are three times more likely to be tested positive for rabies than a dog, in the United States.

Has human rabies occurred in Washington? There was one fatal case of human rabies in Washington in 1995 and one in 1997. Both were due to bat rabies virus. These cases were the first reported in the state since 1939.

How is rabies spread? The rabies virus is found in the saliva of a rabid animal. It is usually spread to humans by animal bites. Rabies could potentially be spread if the virus comes into contact with mucous membranes (eye, nose, respiratory tract), open cuts, wounds, or abraded skin. Person-to-person transmission of rabies has occurred only through tissue transplantation.

What are the symptoms? While early symptoms include headache, fever, and sometimes pain at the site of the exposure (bite), the disease rapidly progresses into a severe neurological illness. Neurological symptoms may include agitation, confusion, paralysis, and difficulty swallowing. Most patients die within a few days or weeks of onset.

How soon do symptoms appear? Normally two to eight weeks after exposure, but the incubation period may vary.

What should I do if an animal bites me? Contact your doctor and local health department to determine the potential for rabies exposure, the need for treatment, and to decide whether or not to test the animal for rabies.

What preventive measures and treatment are available after exposure to rabies occurs? Safe and effective treatment following potential rabies exposure should begin immediately after the exposure occurs.

1. Scrub the site of any animal bite with soap and water.
2. Check the tetanus vaccination status of the person who was bitten.
3. If potential rabies exposure has occurred, a one-time administration of rabies immune globulin and five doses of human diploid cell rabies vaccine should be given in the arm on days 0,3,7,14 and 28 after exposure.

What can I do to reduce the risk of rabies exposure? Do not handle wild animals, especially bats. Teach your children never to touch or handle bats, even dead ones. Have your children tell an adult if they find a bat at home, at school, or with a pet. If you see a wild animal leave it alone. Do not keep wild animals as pets. Keep bats out of your living space. Protect your pets (dogs, cats and ferrets) from getting rabies. Pets may get rabies if bitten by a rabid animal. Protect them and yourself by getting them vaccinated. Consult your veterinarian for vaccine recommendations.

Pre-exposure vaccination Pre-exposure vaccination is recommended for travelers planning to be more than 30 days in an area of the world where rabies is a constant threat. Contact your physician for this information.

Pre-exposure vaccination is also recommended for any person whose occupation involves frequent risk of rabies exposure. In Washington this includes anyone who handles bats, veterinarians, employees in veterinary clinics, and laboratory workers where rabies test specimens are handled.

Where can I get more information?

Call your local health department or www.doh.wa.gov/topics/rabiesfct.html.

Interpretation: WAC 246-320-525 Table 525-3

QUESTION: WAC 246-320-525 Table 525-3, General Pressure Relationships, Ventilation, Temperature, and Humidity of Certain Hospital Areas, the required pressure relationship to adjacent areas within a surgery suite is "P" positive for both Operating Room and Sterile Supply Room. Which room is required to be most positive and to which room when the operating room and sterile supply room are adjacent and connected to each other?

ANSWER: The following recommendations are being made based on the definition of a sterile supply room, clean storage room, and sub-sterile room:

Sterile Supply Room: Is a room, without plumbing or an autoclave, containing sterile supplies where, personnel are required to be outfitted in surgical clothing, masks, and hair covers.

Interpretation: A sterile supply room's airflow must be more positive relative to all other adjacent spaces including the operating room.

Clean Storage Room is a room containing clean and sterile supplies and equipment that may or may not have an autoclave. Staff is outfitted with surgical clothing, hair covers and may or may not be wearing masks.

Interpretation: The clean storage room is positive to all other adjacent spaces, EXCEPT, it shall negative to an operating room.

Sub-Sterile Room is a room containing cleaning supplies, sinks, and may have an autoclave, usually adjoining an operating room. Staff is outfitted with surgical clothing, hair covers, and may or may not be wearing masks.

Interpretation: The sub-sterile is negative to all other adjacent spaces.

In all cases, the number of doors between rooms and corridors must be kept to a minimum and must be closed when not in immediate use.

Filing a Public Disclosure Request

All Public records, maintained or owned by the Department of Health, are discloseable unless there is a specific statue that exempts the record from disclosure. This applies to the records maintained or owned by the Construction Review Services program.

If you'd like to request copies or inspect a record of interest, file a public disclosure request by following the instructions provided below.

1. Write down the specific information you're requesting, include the timeframe in which you desire the information and provide your complete contact information (return address, phone, fax, & e-mail).

2. Initiate your request by mailing, faxing, or e-mailing your request to:
   Department of Health, Facilities and Services Licensing, 310 Israel Rd, Tumwater, WA, 98504 attention Allen Spaulding. FAX (360) 236-2901 or E-mail to al.spaulding@doh.wa.gov

Upon receipt of your request the Department of Health has five days to acknowledge your request, communicate the availability and/or timeframe in which the information will be available and provide an estimate for any costs associated with reproduction.

Please feel free to contact Allen Spaulding, Disclosure Officer, directly at (360) 236-2929 or by e-mail with any question concerning disclosure of public information.
-Allen Spaulding

Food Service Rule Changes

The Washington State Department of Health conducted public workshops during September 2003 in order to gain input on the first draft of a proposed major revision of the state's food service rules, Chapter 246-215 WAC. The department has worked with advisory groups for over a year to develop this first draft. The intention with the rule revision is to adopt the 2001 FDA Food Code, with modifications. The workshops will give an opportunity for any interested person to make comments that will be evaluated for inclusion into a second, and possibly final draft of the rule revision. The State Board of Health is expected to consider additional comments on the final draft at a public hearing in late 2004. More information may be found on their wed site at: http://www.doh.wa.gov/ehp/sf/FoodRuleMain.htm

HFMA Executive Committee Endorses Corridor installation of Alcohol Based Hand-Washing Gel

After much debate and review of the pros and cons to install alcohol-based hand-washing gel in corridors, the Health Care Fire Marshal's Association (HFMA) Executive Committee voted unanimously in favoring the corridor installation of containers holding the hand cleaner. The Committee acknowledges the alcohol-based gel is classified as a class I flammable liquid and the a degree of risk accompanying these location. Despite the class I flammable liquid classification of the gel and the risk it presents, the decision was based on risk; the fire risk versus the risk of a hospital acquired infection. The Committee felt that the fire risk was minimal compared to the risk of spreading an infection, that according to the Centers for Disease Control (CDC) in Atlanta, claims thousands of lives annually.

The Committee reviewed decisions of other professional organizations and found that all agreed that the alcohol based gel was a valuable asset for healthcare workers in reducing the number of hospital acquired infections. All of the other organizations agreed that it should be used, but recommended that the container be placed in a patient room or in a corridor that was not considered an egress corridor.

The HFMA Executive Committee includes several former professional fire-fighting officials who were a chief or higher with many years of fire-fighting experiences. All agreed, that if the container were involved in a fire, it wouldn't matter much if it were in an egress or side corridor. The smoke and heat would spread making all adjoining corridors impassable. As for the room use, that seems to suggest that the sacrifice of one or two patients would be acceptable as long as the corridor was protected. In addition, past indicators clearly show that fires originating in patient rooms has taken the lives of many outside of the room, even on other floors. Staff has not always been able to rescue the patient from a room involved in fire and close the door as is the suggested practice.

None of the members on the Executive Committee could recall a fire originating in a corridor resulting in fire deaths although everyone was able to recall life taking fires that originated in patients rooms. Additionally, fire cause in healthcare or more often linked to careless smoking or oxygen related and not to the misuse or placement of clinical products such as isopropyl alcohol, etc.

It was further determined that if a person was to violate the stringent fire safety policies of a healthcare facility, it would be more likely to happen in the privacy of a patient room than it would in a corridor. Therefore, it was questionable as to what source of ignition would ignite the container in a corridor. It is a fact, that unauthorized smoking is not uncommon in a hospital patient room. Several members of the Executive Committee have experienced fires in patient rooms with confused or disgruntled patients purposely setting some of them. None of the members can recollect a corridor fire initiated by a patient. The visibility and continuous activity in a corridor is a huge deterrent for such occurrences.

The Committee understood that present fire and safety regulations prohibit the use of class I flammable liquids in egress corridors and that may have been a factor in other organizations not supporting its use in corridors.

The Committee tried to look at the issue as a matter of reality and not a code compliance issue. The present codes did not have this particular item in mind when they were written. NFPA 30 and NFPA 101 (Life Safety Code) are often mentioned as references, but neither provides a clear guidance on the issue. They address bulk storage more so than a 32 once container.

It was felt that the applicable codes can be revisited and exceptions added that would permit the use of alcohol-based gels without violating approved regulations. In the interim, jurisdictions that have adopted the applicable codes restricting such use in corridors can be approached requesting a variance. Undoubtedly, not every AHJ will buy into the comparison of infection risk versus fire risk without some sort of documentation and even then some will not stray from the written word of the code. The State of Michigan does not allow the use of the gel in egress corridors, but they do allow its use in patient rooms. The State of Tennessee allows the gel to be installed in the corridor.

The Committee recognizes the importance and convenience of hand-gels as an additional tool in the reduction of hospital acquired infections and strongly supports training for the safe use and storage of the material. The installation of the alcohol-based gel in corridors near the entrance to patient rooms will provide that convenience, thus reducing the number of hospital acquired infections.

(continued on page 7)

...Handwashing Gels (continued from page 6)

It is going to require strict policies to ensure all persons coming in direct contact with patients use it. Training on its use must also become a necessity.

Although the HFMA supports the corridor installation of the alcohol-based hand-washing gel containers in any facility, it is strongly recommended that the facility is sprinkler protected. Facilities that want to insure the safety as they are with infection control.

The HFMA warns facilities not to let their guard down when it comes to fire safety. The staff needs to be aware that the alcohol-base gel has the same flammability rating as isopropyl alcohol and caution needs to be taken in its use and storage. The storage requirements in NFPA 30 and NFPA 101 must be followed when looking into the storage. It is recommended that supplies are kept at an absolute minimum and protected according to all applicable codes.

- Bob Shewbrooks, President, HFMA

The HFMA was organized in 1968 for the purpose of promoting fire safety in healthcare. Their mission "So that lives saved by science and skill may not be lost—by fire" best describes the purpose organization. For more information on HFMA visit their website at: HTTP://members.tripod.com/HFMA

It is important to note that the state Department of Health and the state Fire Marshal's Office have not made a decision regarding the use of these devices. The Department has allowed the use of the gels in corridors on an interim basis in fully sprinkled facilities. The American Society for Healthcare Engineering (ASHE) recommends that until a decision is made, and the studies have been completed, that up to 10 gallons of sanitizer may be stored in a room that's one hour fire resistance. Depending on the results of the studies these recommendations may be modified, possibly to the extent of removing existing corridor installations.

-Chad Beebe

2000 Life Safety Code® Part II

Chapter 5, Utilizing the Performance Based Option

One of the more beneficial changes to the 2000 Life Safety Code is the adoption of chapter 5, Performance Based Option. The performance-based option is an alternative to the prescriptive provisions and allows the design team and the authority having jurisdiction (AHJ) to have more flexibility when unique design problems are not anticipated in the code. The performance option requires the Architect and the AHJ to agree on the code in terms of the goals, objectives, desired levels of safety, appropriate fire scenarios, assumptions, and safety factors.

Under the Performance Based Option, the owner shall annually certify compliance with the conditions and limitations of the design by submitting a warrant of fitness acceptable to the AHJ. The warrant of fitness shall attest that the building features, systems, and use, have been inspected and confirmed to remain consistent with design specifications and that the building continues to satisfy the goals and objectives. The goal is to provide an environment for the occupant that is reasonably safe from fire and similar emergencies. The objective is specific Life Safety Code issues that present requirements that must be satisfied in order to achieve the goals.

The continued level of building construction including openings, interior finish, fire and smoke-resistive construction, and the building and fire protection systems need to retain at least the same level of performance as is provided for in the original design. The use and occupancy should not change to the degree that assumptions made about the occupant characteristics, combustibility of furnishings, and existence of trained personnel, are no longer valid.

Proper documentation of a performance design is critical to the design acceptance and construction. All aspects of the design shall be documented in a format and content that will be acceptable to the AHJ. Proper documentation will also ensure that all parties involved understand what is necessary for the design implementation, maintenance, and continuity of the fire protection design. Chapter 5 outlines the process.

-Douglas Taylor

The Square Knot

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"The Department of Health works to protect and improve the health of the people in Washington State."

The Back Page

Did You Know?

Construction Review Services offers 100% plan review services for Local Building Officials. Contact Chad Beebe at (360) 236-2944.

New Street Name and Directions to DOH

The City of Tumwater has renamed "Airdustrial Way" to Tumwater Boulevard. The I-5 exit number has not changed, it remains Exit 101.

DOH still does not have an address on the street side of our offices. However, we are the white pillared building next to the U.S. Post Office on Israel Road.

All other aspects of the map provided in the April 2003 Square Knot remain the same, which is available on our web site.

The next issue ...of the Square Knot is January 2004

Our deadline for articles is November 3, 2003.

Submissions should be about 450-600 words
CRS reserves the right to edit or publish articles.

E-mail your comments and articles to:
fslcrs@doh.wa.gov
Editor: John R. Templar, RS

The next issue will provide you information about:

More New Staff
and
Other Good Stuff

Construction Review Services Mission

"Construction Review Services protects and improves the health and safety of people in Washington State by providing professional consultation and review for the design and construction of licensed or certified care facilities for our customers."